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10/679,836	10/06/2003	Douglas W. Wager	CRNL108-473	3738
46169 7590 05/04/2010 SHOOK, HARDY & BACON L.L.P. (Cerner Corporation) Intellectual Property Department 2555 GRAND BOULEVARD KANSAS CITY, MO 64108-2613				
EXAMINER				
RAJ, RAJIV J				
ART UNIT		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/679,836

Applicant(s)

WAGER ET AL.

Examiner

RAJIV J. RAJ

Art Unit

3686

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-7,9-24 and 39-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-7,9-24 and 39-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12 February 2010
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Status of Claims

1. This action is in reply to the amendment filed on 03 February 2010.
2. Claims 1-2, 5-7, 9, 12-13, 16, 19-20 & 39-41 have been amended.
3. Claims 3, 4 & 8 have been canceled.
4. Claim 49 has been added.
5. Claims 1-2, 5-7, 9-24 and 39-49 are currently pending and have been examined.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. In light of the amendments to claims 1-24 & 40, the previous rejection under 35 U.S.C. 101, is withdrawn.
8. Claim 39 is rejected under 35 U.S.C. 101 based on Supreme Court precedent, and recent Federal Circuit decisions, a § 101 process must (1) be tied to a machine or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780,787-88 (1876). The process steps in claim (39) is not tied to a machine nor do they execute a transformation. Thus, they are non-statutory.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 1-2, 5, 7-17, 19-24, & 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whiting-O'Keefe (US 6061657) in view of Pollack (US 5809477) in further view of Andre et al. (US 7155399 B2) (hereinafter Andre).

As per claim 1**Whiting-O'Keefe as shown, teaches the following limitation:**

- *determining a type of patient population that the particular patient is a member of;* (see at least Whiting-O'Keefe Claims:1,2,6 & 44 and Fig:3 & related text)
- *accessing work factors for the type of patient population;* (see at least Whiting-O'Keefe Fig:3 Items:33-45 & related text)
- *calculating, with a computer processor, a work score for the particular patient using the satisfied work factors;* (see at least Whiting-O'Keefe Fig:2 Items:17-29 Fig:3 Fig:6,7 Fig:9 Items:161-179 & related text)

Whiting-O'Keefe fails to teach the following limitations, however Pollack does:

- *obtaining patient data for the particular patient directly from a primary clinical information systems; (see at least Pollack Fig:2 Item:210 Fig:3 Item:310 & related text)*
- *comparing the data for the particular patient to the work factors to determine which factors are satisfied; (see at least Pollack Fig:5&6 Items:500-655 & related text)*
- *accessing a weighted value for each satisfied work factor; (see at least Pollack Fig:3,5,6 & related text)*
- *assigning each satisfied work factor with a weighted score; (see at least Pollack Fig:2 Items:200-230 Fig:3 Items:200-340 Fig:4 Items:400-450 & related text)*

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe. One of ordinary skill in the art would have added these features into Whiting-O'Keefe with the motivation of providing higher quality medical care while being more efficient with medical resources. (see at least Pollack Column:3 Lines:30-38)

Whiting-O'Keefe/Pollack fails to teach the following limitations, however Andre does:

- *wherein the work score indicates a quantity of personnel hours anticipated to serve particular patient; (see at least Andre Fig:2 Items:402-428 Fig:3 Item:202-208, 214 Fig:4 Items:310, 320 & related text)*
- *storing the particular patient's work score; (see at least Andre Claim:13 Fig:3 Item:202-208, 214 & related text)*

It would have been obvious to one of ordinary skill in the art to add these features of Andre into Whiting-O'Keefe/Pollack. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Pollack with the motivation of providing an improved invention for assessing, determining and implementing appropriate staff to provide the best service for users, such as customers, clients and patients. (see at least Andre Column:2 Lines:52-67 Column:3 Lines:1-3)

As per claim 2

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 1.

Whiting-O'Keefe discloses the following limitation:

- *receiving a request for a particular patient's work score;* (see at least Whiting-O'Keefe Fig:2 Items:17 & related text)

As per claim 5

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 4.

Pollack discloses the following limitation:

- *each work factor has one or more assigned weighted values;* (see at least Pollack Column:17 Line:67 & Column:18 Lines:1-5 "At Item 320, a numerical value based on patient information is assigned for each category of diagnostic information and for each group of categories. Rules and guidelines for the assignment of numerical values are set forth in the detailed descriptions of the scoring methodologies set forth above")

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Pollack/Andre. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Pollack/Andre with the motivation of providing higher quality medical care while being more efficient with medical resources. (see at least Pollack Column:3 Lines:30-38)

As per claim 7

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 5.

Whiting-O'Keefe discloses the following limitation:

- *obtaining rules for generating a work score for the particular patient;* (see at least Whiting-O'Keefe Column:8 Lines:45-62)

As per claim 9

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 1.

Whiting-O'Keefe discloses the following limitation:

- *the patient data is one of outstanding orders, outstanding tasks, completed orders, completed tasks, services provided by personnel over a period of time, scheduled procedures, scheduled outpatient care, assigned tasks, assigned orders, assessments, tasks, services typically delivered*

for a specific patient or patient type and combinations thereof (see at least Whiting-O'Keefe Column:4 Lines:50-67)

As per claim 10

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 1.

Whiting-O'Keefe discloses the following limitation:

- *wherein the work score is prospective* (see at least Whiting-O'Keefe Fig:10 Items:193 & related text)

As per claim 11

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 1.

Whiting-O'Keefe discloses the following limitation:

- *wherein the work score is retrospective* (see at least Whiting-O'Keefe Fig:10 Items:191 & related text)

As per claim 12

Whiting-O'Keefe as shown, teaches the following limitation:

- *determining a type of patient population that each of the one or more patient are a member of;* (see at least Whiting-O'Keefe Claims:1,2,6 & 44 and Fig:3 & related text)
- *accessing work factors for the type of patient population;* (see at least Whiting-O'Keefe Fig:3 Items:33-45 & related text)
- *calculating, with the processor, a work score for each of the one or more patients in a patient population;* (see at least Whiting-O'Keefe Fig:2 Items:17-29 Fig:3 Fig:9 Items:161-179 & related text)

Whiting-O'Keefe fails to teach the following limitations, however Pollack does:

- *obtaining patient data for the particular patient directly from a primary clinical information systems;* (see at least Pollack Fig:2 Item:210 Fig:3 Item:310 & related text)
- *comparing the patient data for the particular patient to the work factors to determine which factors are satisfied;* (see at least Pollack Fig:5&6 Items:500-655 & related text)

- *accessing a weighted value for each satisfied work factor;* (see at least Pollack Fig:3,5,6 & related text)
- *assigning each satisfied work factor with a weighted score;* (see at least Pollack Fig:2 Items:200-230 Fig:3 Items:200-340 Fig:4 Items:400-450 & related text)
- *calculating staffing needs for the patient population based on the work scores obtained for the one or more patients in the patient population* (see at least Pollack Claim:1 (b)-(d))

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe. One of ordinary skill in the art would have added these features into Whiting-O'Keefe with the motivation of providing higher quality medical care while being more efficient with medical resources. (see at least Pollack Column:3 Lines:30-38)

Whiting-O'Keefe/Pollack fails to teach the following limitations, however Andre does:

- *wherein the work score is a value that indicates an amount of work to treat each of the one or more patients in the patient population;* (see at least Andre Fig:2 Items:402-428 Fig:3 Item:202-208, 214 Fig:4 Items:310, 320 & related text)
- *storing one or more work scores for the one or more patients in the patient population;* (see at least Andre Claim:13 Fig:3 Item:202-208, 214 & related text)

It would have been obvious to one of ordinary skill in the art to add these features of Andre into Whiting-O'Keefe/Pollack. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Pollack with the motivation of providing an improved invention for assessing, determining and implementing appropriate staff to provide the best service for users, such as customers, clients and patients. (see at least Andre Column:2 Lines:52-67 Column:3 Lines:1-3)

As per claim 13

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 12.

Whiting-O'Keefe discloses the following limitation:

- *receiving a request for a particular patient in the work score for the patient population;* (see at least Whiting-O'Keefe Fig:1 A-C)

As per claim 14

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 13.

Whiting-O'Keefe discloses the following limitation:

- *determining the patients in the population*; (see at least Whiting-O'Keefe Fig:3 Item:31)

As per claim 15

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 14.

Whiting-O'Keefe discloses the following limitation:

- *obtaining the work factors for the population* (see at least Whiting-O'Keefe Fig:3 Item:33-37)

As per claim 16

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 15.

Whiting-O'Keefe discloses the following limitation:

- *determining which of the factors are triggered by the data for the particular patient in the population*; (see at least Whiting-O'Keefe Claim:20 "solving an estimate model of a total amount of charges for the encounters within a summary record as a function of a plurality of model variables and regression coefficients taken or derivable from the data within said at least one summary record, said regression coefficients having been previously determined with the same estimate model to optimize a fit of said estimate model for a population of patients with data within a summary record corresponding to said at least one summary record")

As per claim 17

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 15.

Pollack discloses the following limitation:

- *wherein each factor has an assigned value* (see at least Pollack Column:17 Line:67 & Column:18 Lines:1-5 "At Item 320, a numerical value based on patient information is assigned for each category of diagnostic information and for each group of categories. Rules and guidelines for the assignment of numerical values are set forth in the detailed descriptions of the scoring methodologies set forth above")

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Pollack/Andre. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Pollack/Andre with the motivation of providing higher quality medical care while being more efficient with medical resources. (see at least Pollack Column:3 Lines:30-38)

As per claim 19

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 17. Whiting-O'Keefe discloses the following limitation:

- *obtaining rules for generating a work score for a particular patient in the population* (see at least Whiting-O'Keefe Column:8 Lines:45-62)

As per claim 20

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 19. Whiting-O'Keefe discloses the following limitation:

- *utilizing the rules and values of factors triggered by the data to generate a work score for the particular patient in the patient population;* (see at least Whiting-O'Keefe Fig:2 Items:17-29 Fig:3 & related text)

As per claim 21

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 20. Whiting-O'Keefe discloses the following limitation:

- *accumulating the work scores for all patients in the population;* (see at least Whiting-O'Keefe Claim:17)

As per claim 22

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 21. Pollack discloses the following limitation:

- *obtaining staffing standards for the population* (see at least Pollack Fig:2 Items:220 Fig:6 Items:645 & related text)

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Pollack/Andre. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Pollack/Andre with the motivation of providing higher quality medical care while being more efficient with medical resources. (see at least Pollack Column:3 Lines:30-38)

As per claim 23

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 22. Pollack discloses the following limitation:

- *calculating staffing needs based on the work scores obtained for the patients in the patient population and the staffing standards for the population;* (see at least Pollack Claim:1 (b)-(d))

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Pollack/Andre. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Pollack/Andre with the motivation of providing higher quality medical care while being more efficient with medical resources. (see at least Pollack Column:3 Lines:30-38)

As per claim 24

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 12. Whiting-O'Keefe discloses the following limitation:

- *the data is one of outstanding orders, outstanding tasks, completed orders, completed tasks, services provided by personnel over a period of time, scheduled procedures, scheduled outpatient care, assigned tasks, assigned orders, assessments, tasks, services typically delivered for a specific patient or patient type and combinations thereof* (see at least Whiting-O'Keefe Column:4 Lines:50-67)

As per claim 40

Whiting-O'Keefe as shown, teaches the following limitation:

- *calculating, with a computer processor, a work score for each patient in a patient population utilizing data obtained directly from a primary clinical information system;* (see at least Whiting-O'Keefe Fig:2 Items:17-29 Fig:3 Fig:9 Items:161-179 & related text)

Whiting-O'Keefe fails to teach the following limitations, however Pollack does:

- *calculating staffing needs for the patient population based on the work scores obtained for each patient in the patient population* (see at least Pollack Claim:1 (b)-(d))

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe. One of ordinary skill in the art would have added these features into Whiting-O'Keefe with the motivation of providing higher quality medical care while being more efficient with medical resources. (see at least Pollack Column:3 Lines:30-38)

Whiting-O'Keefe/Pollack fails to teach the following limitations, however Andre does:

- *wherein the work score is a quantity of personnel hours required to serve each patient in the patient population by a healthcare provider;* (see at least Andre Fig:2 Items:402-428 Fig:3 Item:202-208, 214 Fig:4 Items:310, 320 & related text)
- *storing the work score for each patient;* (see at least Andre Claim:13 Fig:3 Item:202-208, 214 & related text)

It would have been obvious to one of ordinary skill in the art to add these features of Andre into Whiting-O'Keefe/Pollack. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Pollack with the motivation of providing an improved invention for assessing, determining and implementing appropriate staff to provide the best service for users, such as customers, clients and patients. (see at least Andre Column:2 Lines:52-67 Column:3 Lines:1-3)

12. Claims 6, 18, 39 & 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whiting-O'Keefe in view of Pollack in view of Andre in further view of Richardson et al. (US 6193654 B1) (hereinafter Richardson).

As per claim 6

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 5. Richardson further discloses the following limitation:

- *adjusting the weighted value of one or more work factors triggered by the patient data based on rules;* (see at least Richardson Claim:19 (g) "At Item 320, a numerical value based on patient information is assigned for each category of diagnostic information and for each group of categories. Rules and guidelines for the assignment of numerical values are set forth in the detailed descriptions of the scoring methodologies set forth above")

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Pollack/Andre. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Pollack/Andre with the motivation of providing optimal healthcare through accurate monitoring of medical parameters. (see at least Richardson Column:3 Lines:36-48)

As per claim 18

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 17.

Richardson further discloses the following limitation:

- *adjusting the value of one or more factors triggered by the data;* (see at least Richardson Claim:19 (g) "At Item 320, a numerical value based on patient information is assigned for each category of diagnostic information and for each group of categories. Rules and guidelines for the assignment of numerical values are set forth in the detailed descriptions of the scoring methodologies set forth above")

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Pollack/Andre. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Pollack/Andre with the motivation of providing optimal healthcare through accurate monitoring of medical parameters. (see at least Richardson Column:3 Lines:36-48)

As per claim 39

Whiting-O'Keefe as shown, teaches the following limitation:

- *determining a type of patient population that the particular patient is a member of;* (see at least Whiting-O'Keefe Claims:1,2,6 & 44 and Fig:3 & related text)

- *accessing work factors for the type of patient population;* (see at least Whiting-O'Keefe Fig:3 Items:33-45 & related text)
- *utilizing the weighted score a first instance of a work score for the particular patient using the satisfied work factors;* (see at least Whiting-O'Keefe Fig:2 Items:17-29 Fig:3 Fig:6,7 Fig:9 Items:161-179 & related text)
- *determining a type of patient population that the patient is a member of;* (see at least Whiting-O'Keefe Claims:1,2,6 & 44 and Fig:3 & related text)
- *accessing work factors for the type of patient population;* (see at least Whiting-O'Keefe Fig:3 Items:33-45 & related text)
- *utilizing the weighted score to calculate a second instance of a work score for the particular patient using the satisfied work factors;* (see at least Whiting-O'Keefe Fig:2 Items:17-29 Fig:3 Fig:6,7 Fig:9 Items:161-179 & related text)

Whiting-O'Keefe fails to teach the following limitations, however Pollack does:

- *obtaining patient data for a particular patient at a first point in time directly from a primary clinical information systems;* (see at least Pollack Fig:2 Item:210 Fig:3 Item:310 & related text)
- *comparing the patient data for the particular patient to the work factors to determine which factors are satisfied;* (see at least Pollack Fig:5&6 Items:500-655 & related text)
- *accessing weighted value for each satisfied work factor;* (see at least Pollack Fig:3,5,6 & related text)
- *assigning each satisfied work factor with a weighted score;* (see at least Pollack Fig:2 Items:200-230 Fig:3 Items:200-340 Fig:4 Items:400-450 & related text)
- *obtaining patient data for the particular patient at a second point in time directly from a primary clinical information systems;* (see at least Pollack Fig:2 Item:210 Fig:3 Item:310 & related text)
- *comparing the patient data for the particular patient to the work factors to determine which factors are satisfied;* (see at least Pollack Fig:5&6 Items:500-655 & related text)

- *accessing weighted value for each satisfied work factor;* (see at least Pollack Fig:3,5,6 & related text)
- *assigning each satisfied work factor with a weighted score;* (see at least Pollack Fig:2 Items:200-230 Fig:3 Items:200-340 Fig:4 Items:400-450 & related text)
- *wherein the first instance of a work score is compared to a second instance of a work score for the particular patient based on the patient data in the primary clinical information system;* (see at least Pollack Fig:5&6 Items:545-645 & related text)

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe. One of ordinary skill in the art would have added these features into Whiting-O'Keefe with the motivation of providing higher quality medical care while being more efficient with medical resources. (see at least Pollack Column:3 Lines:30-38)

Whiting-O'Keefe/Pollack fails to teach the following limitations, however Andre does:

- *wherein the first instance of a work score includes a measure of personnel hours anticipated for the particular patient at a first point in time;* (see at least Andre Fig:2 Items:402-428 Fig:3 Item:202-208, 214 Fig:4 Items:310, 320 & related text)
- *storing the first instance of a work score;* (see at least Andre Claim:13 Fig:3 Item:202-208, 214 & related text)
- *storing the second instance of a work score;* (see at least Andre Claim:13 Fig:3 Item:202-208, 214 & related text)

It would have been obvious to one of ordinary skill in the art to add these features of Andre into Whiting-O'Keefe/Pollack. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Pollack with the motivation of providing an improved invention for assessing, determining and implementing appropriate staff to provide the best service for users, such as customers, clients and patients. (see at least Andre Column:2 Lines:52-67 Column:3 Lines:1-3)

Whiting-O'Keefe/Pollack/Andre fails to teach the following limitations, however Richardson does:

- *trending the work score for the particular patient;* (see at least Richardson Fig:3 & related text)

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Pollack/Andre. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Pollack/Andre with the motivation of providing optimal healthcare through accurate monitoring of medical parameters. (see at least Richardson Column:3 Lines:36-48)

As per claim 49

The combination of Whiting-O'Keefe/Pollack/Andre/Richardson discloses all of the limitations of claim. Pollack further discloses the following limitation:

- *further comprises more than two instances of a work score for the particular patient based on the patient's data in the primary clinical information system;* (see at least Pollack Fig:5&6 Items:545-645 & related text)

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Pollack/Andre/Richardson. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Pollack/Andre/Richardson with the motivation of providing higher quality medical care while being more efficient with medical resources. (see at least Pollack Column:3 Lines:30-38) Whiting-O'Keefe/Pollack/Andre/Richardson fails to teach the following limitations, however Richardson does:

- *trending the work score for the particular patient;* (see at least Richardson Fig:3 & related text)

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Pollack/Andre/Richardson. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Pollack/Andre/Richardson with the motivation of providing optimal healthcare through accurate monitoring of medical parameters. (see at least Richardson Column:3 Lines:36-48)

13. Claims 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Whiting-O'Keefe in view Pollack in further view of Zaleski (US 2003/0101076 A1).

As per claim 41

Whiting-O'Keefe as shown, teaches the following limitation:

- *a work calculation module for calculating a work score for one or more patients; (see at least Whiting-O'Keefe Fig:2 Items:17-29 Fig:3 & related text)*

System claim 41 repeats the subject matter of method claim 1 respectively, as a system rather than a series of steps. As the underlying process of claim 1 has been shown to be fully disclosed by the teachings of Whiting-O'Keefe in the above rejection of claim 1, it is readily apparent that the limitations disclosed by Whiting-O'Keefe include the apparatus to perform these functions. As such, these limitations are rejected for the same reasons given above for method claim 1 and incorporated herein.

- *receiving input from the work calculation module about prospective workload; (see at least Whiting O'Keefe Fig:2&3 Items:17-45 & related text)*
- *a demand forecast module for forecasting the volume and type of patients who will present; (see at least Whiting-O'Keefe Fig:3 Items:43-45 & related text)*
- *communicating information regarding a forecasted demand generated by the demand forecast module to the work calculation module and communication information; (see at least Whiting O'Keefe Column:12 Lines:62-67 Column:13 Lines:1-15 Fig:3 Items:43-45 & related text)*
- *a resource dashboard module for . . . displaying information regarding personnel and patients (see at least Whiting-O'Keefe Fig:9 Items:163, 175-179 & related text)*
- *receiving work calculations for the patient population from the work calculation module; (see at least Whiting O'Keefe Fig:2&3 Items:17-45 & related text)*

Whiting-O'Keefe fails to teach the following limitations, however Pollack does:

- *to help determine anticipated clinical demand; (see at least Pollack Claims:1 (b-d) Fig:2 Items:22 Fig:6 Items:640 & related text)*

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe. One of ordinary skill in the art would have added these features into Whiting-O'Keefe with the motivation of providing higher quality medical care while being more efficient with medical resources. (see at least Pollack Column:3 Lines:30-38)

Whiting-O'Keefe/Pollack fails to teach the following limitations, however Zaleski does:

- *a staff scheduling and staffing module for . . . identifying healthcare personnel positions to be filled;* (see at least Zaleski [0007], Fig:1 Items:108, 109 & related text)
- *the staff scheduling and staffing module;* (see at least Zaleski [0007], Fig:1 Items:108, 109 & related text)
- *a role management module for managing the roles and information regarding personnel;* (see at least Zaleski [0005]-[0007])
- *a workforce outcomes module for determining how effectively healthcare personnel have been used;* (see at least Zaleski [0005]-[0007])
- *receiving information regarding staff scheduling from the staff scheduling and staffing module;* (see at least Zaleski [0005-0007] Claim:1 Fig:1 Items:108-109 & related text)

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Pollack. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Pollack with the motivation of providing system for improved clinical decision making, in order to provide more efficient and effective healthcare. (see at least Zaleski [0012])

14. Claims 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whiting-O'Keefe in view of Zaleski in further view of Ross, Jr. et al. (US 7076436 B1) (hereinafter Ross).

As per claim 42

The combination of Whiting-O'Keefe/Zaleski discloses all of the limitations of claim 41. Ross further discloses the following limitation:

- *an enterprise scheduling module for identifying information regarding appointments for outpatient procedures* (see at least Ross Fig:4 Items:102, 116-118 & related text)

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Zaleski. One of ordinary skill in the art would have added these features into Whiting-

O'Keefe/Zaleski with the motivation of providing more accuracy of patients and medical resources in order to allow more effective care by hospital personnel. (see at least Ross Column:1 Lines:9-13)

As per claim 43

The combination of Whiting-O'Keefe/Zaleski discloses all of the limitations of claim 42. Ross further discloses the following limitation:

- *an enterprise scheduling module for identifying information regarding appointments for outpatient procedures* (see at least Ross Fig:7 Items:138 & related text)

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Zaleski. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Zaleski with the motivation of providing more accuracy of patients and medical resources in order to allow more effective care by hospital personnel. (see at least Ross Column:1 Lines:9-13)

15. Claims 44 & 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whiting-O'Keefe in view of Zaleski, in view of Ross, in further view of Richardson.

As per claim 44

The combination of Whiting-O'Keefe/Zaleski/Ross discloses all of the limitations of claim 43. Richardson further discloses the following limitation:

- *a registration module for identifying and tracking patient registration, census and activity* (see at least Richardson Column:6 Lines:45-54)

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Pollack. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Pollack with the motivation of providing optimal healthcare through accurate monitoring of medical parameters. (see at least Richardson Column:3 Lines:36-48)

As per claim 45

The combination of Whiting-O'Keefe/Zaleski/Ross/Richardson discloses all of the limitations of claim 44. Whiting-O'Keefe further discloses the following limitation:

- *a medical records module for capturing and storing patient data* (see at least Whiting-O'Keefe Column:7 Lines:34-47 Fig:9 Items:161-179 & related text)

16. Claims 46 & 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whiting-O'Keefe in view of Zaleski, in view of Ross, in view of Richardson, in further view of Pollack.

As per claim 46

The combination of Whiting-O'Keefe/Zaleski/Ross/Richardson discloses all of the limitations of claim 45. Pollack further discloses the following limitation:

- *a patient severity module for providing information regarding the status and conditions of patients* (see at least Pollack Column:9 Lines:49-51, Fig:3, & related text)

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Zaleski/Richardson/Ross. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Zaleski/Richardson/Ross with the motivation of providing higher quality medical care while being more efficient with medical resources. (see at least Pollack Column:3 Lines:30-38)

As per claim 47

The combination of Whiting-O'Keefe/Zaleski/Ross/Richardson discloses all of the limitations of claim 46. Ross further discloses the following limitation:

- *a departmental tracking module for tracking patients through different departments* (see at least Ross Fig:2 Item:102 & related text)

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Zaleski/Richardson/Ross. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Zaleski/Richardson/Ross with the motivation of providing more accuracy of patients and medical resources in order to allow more effective care by hospital personnel. (see at least Ross Column:1 Lines:9-13)

17. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Whiting-O'Keefe in view of Zaleski, in view of Ross, in view of Richardson, in view of Pollack, in further view of Brandt et al. (US 2003/0050797 A1) (hereinafter Brandt).

As per claim 48

The combination of Whiting-O'Keefe/Zaleski/Ross/Richardson/Pollack discloses all of the limitations of claim 47. Brandt further discloses the following limitation:

- *a personal work queue module for tracking and displaying work to be performed by individual personnel* (see at least Brandt [0005])

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Zaleski/Ross/Richardson/Pollack. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Zaleski/Ross/Richardson/Pollack with the motivation of providing optimal workflow management in a healthcare setting for efficient and effective healthcare for patients. (see at least Brandt [0004])

Response to Arguments

18. Applicant's arguments received on 03 February 2010 have been fully considered but they are not persuasive.

19. The Examiner points out that applicant's arguments are substantially based on the amended claims which have been significantly amended, including language that has was not in the applicant's previous claims. This is the first opportunity for the Office to address these claims, therefore the arguments are moot & thus these amended limitations are addressed in this current Office Action.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant's amendment necessitated any new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAJIV J. RAJ whose telephone number is (571) 270-3930. The examiner can normally be reached on Monday thru Friday 8-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry O'Connor can be reached on (571) 272-6787. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or (571) 272-1000.

Date: 05/01/10
/Rajiv J Raj/
Examiner, Art Unit 3686

/Vivek D Koppikar/
Primary Examiner, Art Unit 3686